

# GE-Housatonic River Superfund Site

## Memo on Property Data Analysis Related to Citing a New Landfill

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### **GE-Housatonic River Property Data Analysis**

EPA had Skeo, an EPA support contractor, conduct an analysis to review available property value and property sales data for the Allendale neighborhood in Pittsfield, Massachusetts, and the surrounding area. The goal was to determine if GE's existing On-Plant Consolidation Area (OPCA) landfill in Pittsfield has negatively impacted nearby residential property values. The findings may help address community concerns about the siting of a new site-related Toxic Substances Control Act (TSCA) landfill in the nearby town of Lee.

#### **Methodology:**

- Skeo obtained assessed property values and available property sales data for the entire city of Pittsfield from the Pittsfield Assessor's Office. Annual property data sets were provided in individual Excel workbooks. The city provided property sales data back to 1981 and assessed property value data back to 2009 (fiscal year [FY] 2010). The city of Pittsfield calculates assessed property values at 100% fair market value. However, as the city bases current-year assessments on prior-year sale information, the city indicated that is not uncommon to observe a lag of assessed values following changes in sales values.
- Skeo obtained GIS shapefiles from Pittsfield of all property parcel boundaries.
- The EPA site team established an appropriate study area boundary that includes residential property parcels in the Allendale neighborhood. The Allendale neighborhood was selected as an appropriate study area because it is located immediately north of an existing GE landfill (the OPCA landfill). The distance between the northern edge of the OPCA landfill and the residences within the Allendale neighborhood study area ranges from about 170 feet to about 1/3 of a mile.
- The approved study area was digitized using GIS (see Figure 1).
- GIS was used to overlay the digitized study area boundary over the property parcel layer to identify all residential parcels in the study area. Study area parcel IDs were exported in an Excel file.
- Using Excel and Access, the parcel IDs were used to pull study area property value and sales data from the city-wide data sets for analysis.

#### **Allendale Study Area Sales Analysis**

1. To evaluate changes in property sales values over time, the sales analysis identified parcels in the Allendale study area that sold more than once since 1981. Study area parcels with sales values of \$0, \$1 and \$10 were omitted from the analysis.
2. Sales values were adjusted to account for inflation using the Consumer Price Index (CPI), provided by the Bureau of Labor Statistics (BLS). CPI is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. Additional information is available on the BLS [website](#).
3. The study area includes 235 residential property parcels. Of those parcels, based on available data, 21 have been sold more than once since 1981. Property sales values increased for 16 of those parcels and decreased for the other five parcels between 1981 and 2020. Only 1 of the 21 parcels was sold both before and after construction of the OPCA landfill; those sales were in 1981 and 2018. The sales values and corresponding changes for the 21 parcels are shown in Table 1.

**Table 1. Changes in Allendale Study Area Property Sales (1981-2020)**

Parcel ID	Property Sale Year	Sales Amount	Property Sale Year	Sales Amount	Sales Change
J110012012	2013	\$137,908	2019	\$146,355	Increase
K110007011	2017	\$64,217	2018	\$117,664	Increase
K110007013	2002	\$100,729	2019	\$134,111	Increase
K110007024	2015	\$113,227	2018	\$130,509	Increase
K110007027	2015	\$113,118	2018	\$118,178	Increase
K110007033	2006	\$195,838	2018	\$143,766	Decrease
K110007044	2011	\$149,133	2018	\$147,871	Decrease
K110008005	2010	\$89,109	2018	\$133,592	Increase
K110008011	2014	\$43,601	2019	\$166,441	Increase
K110009004	2015	\$156,231	2019	\$166,541	Increase
K110009009	1981	\$110,713	2018	\$170,587	Increase
K110009016	2001	\$152,991	2019	\$157,457	Increase
K120002018	2016	\$127,944	2019	\$161,495	Increase
K120006007	2015	\$137,179	2018	\$135,566	Decrease
K120006012	2012	\$87,666	2019	\$151,401	Increase
K120006014	2017	\$219,169	2018	\$137,703	Decrease
K120006015	2012	\$76,989	2018	\$152,089	Increase
K120006017	2007	\$163,035	2018	\$126,399	Decrease
K120007003	2016	\$158,048	2019	\$171,588	Increase
K120007016	2015	\$130,647	2019	\$161,495	Increase
K120008006	2002	\$107,579	2019	\$156,448	Increase
<b>Note:</b> Sales values above are adjusted to 2020 U.S. dollars (USD) using the Consumer Price Index (CUUR0000SA0, not seasonally adjusted, U.S. city annual average).					

Figure 1. Allendale Neighborhood Study Area



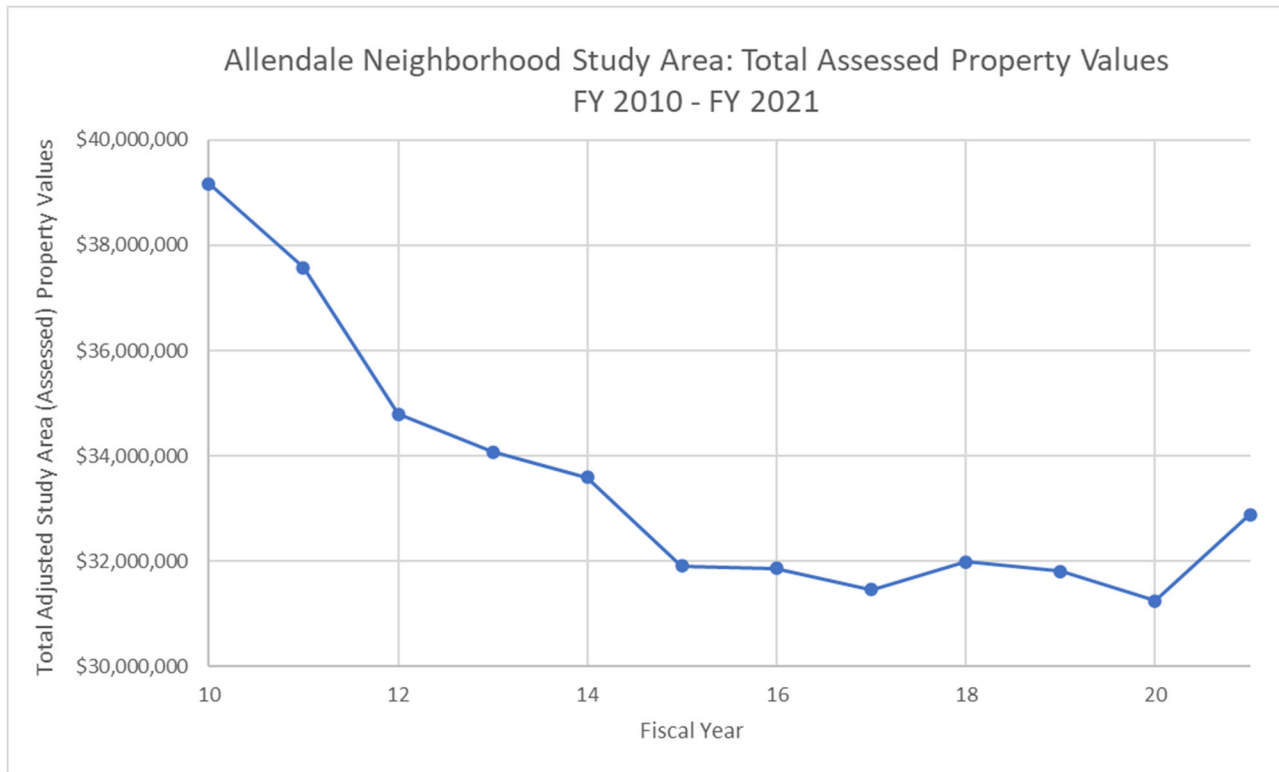
#### Allendale Study Area Assessed Property Value Analysis

1. Assessed property values for the study area were adjusted to account for inflation using CPI.
2. Inflation-adjusted property values were organized in an Excel spreadsheet to show changes in assessed property values between 2009 and 2020 (FY 2010 – FY 2021) for each parcel and collectively, for each year. Assessed property value data were not available for years prior to 2009.
3. Most of the 235 study area parcels experienced an overall decrease in assessed value between 2009 and 2020.
4. The entire study area saw an overall decrease in assessed property values of about 16% between 2009 and 2020, with a recent increase between FY 2020 and FY 2021 (see Figure 2 on page 6).

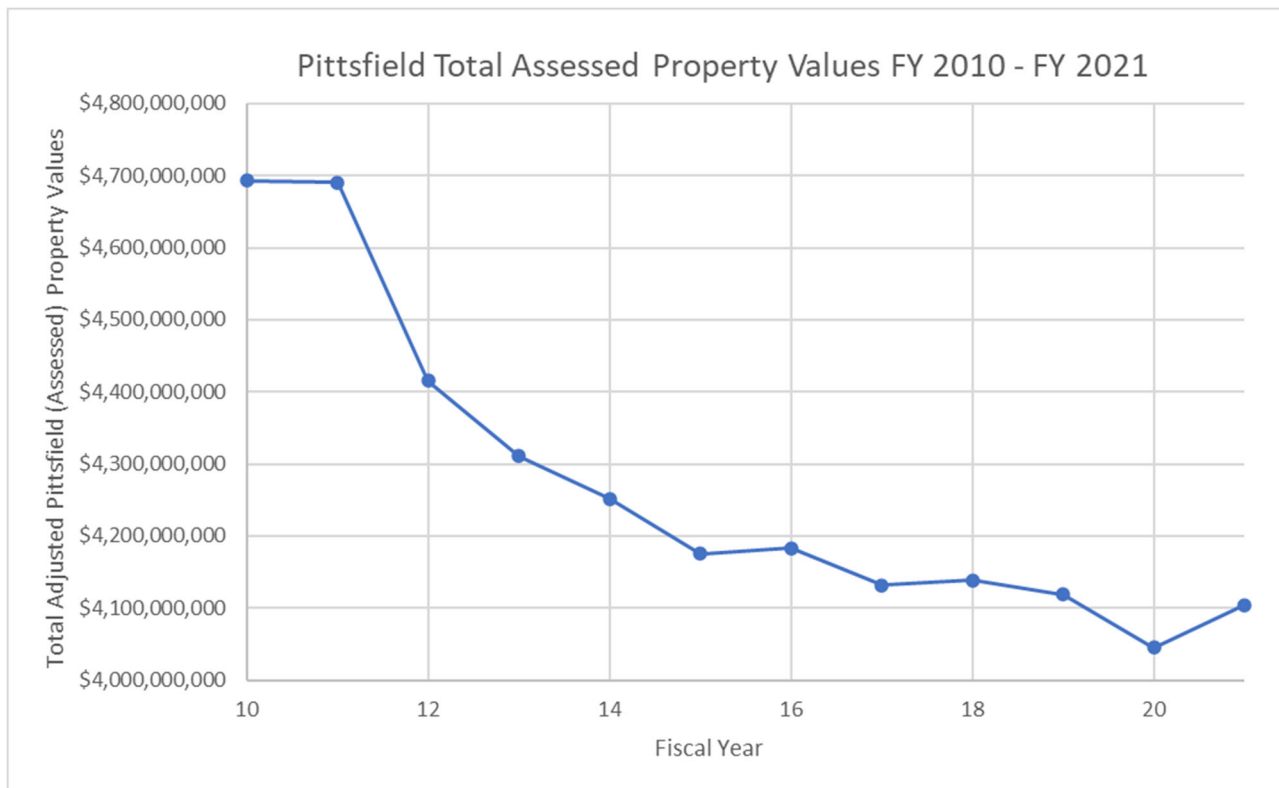
#### City-Wide Pittsfield Assessed Property Value Analysis

1. Assessed property values for the entire city of Pittsfield were adjusted to account for inflation using CPI. This level of analysis included all city parcels, not just residential parcels. The goal was to assess changes in city-wide assessed property values over time and to compare those changes to the results of the study area property value analysis. The goal of this process step was to determine if changes in property values observed in the study area are consistent with changes seen more broadly across Pittsfield.
2. Inflation-adjusted property values were organized in an Excel spreadsheet to show changes in assessed property values between 2009 and 2020 (FY 2010 – FY 2021) for each parcel and collectively, for each year. Assessed property value data were not available for years prior to 2009.
3. The entire city of Pittsfield experienced an overall decrease in assessed property values of about 13% between 2009 (FY 2010) and 2020 (FY 2020), with a recent increase between FY 2020 and FY 2021 (see Figure 3 on page 6).
4. Changes in property values at the city level are attributed to several different factors; it would not be appropriate to attribute changes at that scale to the placement of a single landfill in the late 1990s.

**Figure 2. Changes in Assessed Annual Total Study Area Property Values, FY 2010 – FY 2021**



**Figure 3. Changes in Assessed Annual Total Pittsfield Property Values, FY 2010 – FY 2021**



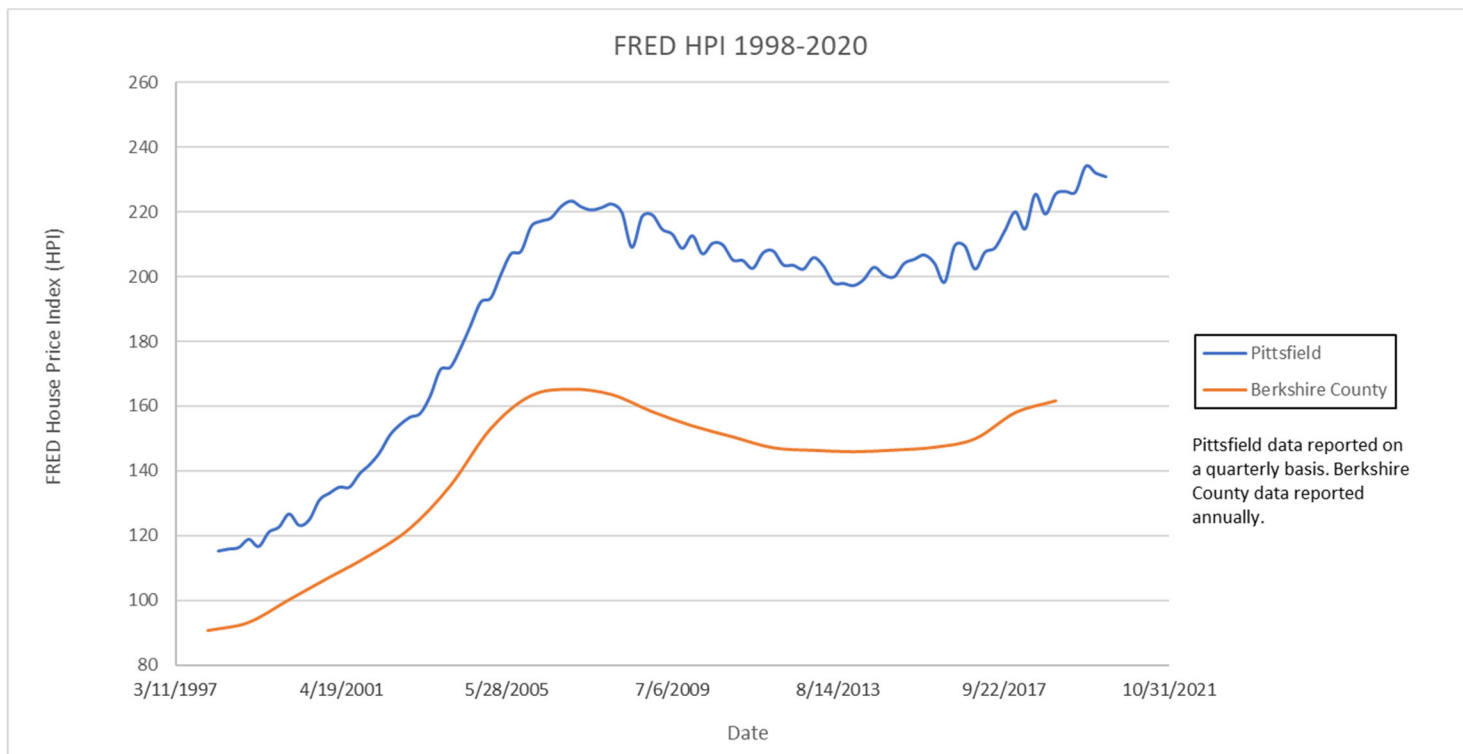


## FRED Data: Pittsfield and Berkshire County

[Federal Reserve Economic Data \(FRED\)](#) is an online database consisting of hundreds of thousands of economic data time series from national, international, public and private sources. The Research Department at the Federal Reserve Bank of St. Louis maintains it. The database provides Federal Housing Finance Agency (FHFA) House Pricing Index (HPI) information. The index is the nation's only public, freely available index that measures changes in single-family house prices based on data covering all 50 states and over 400 American cities. Extending back to the mid-1970s, the HPIs are built on tens of millions of home sales and offer insights about house-price fluctuations at national, census division, state metro area, county, ZIP code and census tract levels. The FHFA HPI is a broad measure of the movement of single-family house prices. The FHFA HPI is a weighted, repeat-sales index. This means that it measures average price changes in repeat sales or refinancing on the same properties.

The FRED database was used to evaluate general, large-scale patterns in residential property sales in both Pittsfield and Berkshire County between 1998 and 2020. The goal was to determine if changes observed in sales in the Pittsfield area were consistent with broader changes at the county level, and to determine if Pittsfield experienced a notable change in property sales values soon after construction of the OPCA landfill. Public awareness of the landfill's construction started in 1999. Therefore, this analysis evaluates data back to 1998 to capture a pre-landfill baseline and any changes observed immediately after landfill construction. Figure 4 shows changes in HPI for properties in Pittsfield and Berkshire County from 1998 and 2020.

**Figure 4: FRED HPI for Pittsfield and Berkshire County, 1998 to 2020**



Comparison of the two data sets shows that Pittsfield has higher residential property sales values and more small-scale fluctuations than Berkshire County. Overall trends in sales values in Pittsfield and the county are relatively consistent with each another since 1998, indicating no significant differences between sales at the city and county levels.

In the years after construction of the OPCA landfill, property sales values in Pittsfield increased consistently until around 2008, when both city and county sales values decreased as a result of the Great Recession. The overall increases in housing sales prices between 1998 and 2008 can be attributed to many factors. While it would not be appropriate to associate any changes at such a general level (entire city and county) to construction of a landfill in Pittsfield in the late 1990s, the increase in property sales values observed in Pittsfield between 1998 and 2008 confirms that there was no city-wide decrease in property sales values observed following construction of the landfill. Changes observed following the 2008 Great Recession reflect the generally slow rebound of property sales values observed nationwide.

### Conclusions

This property data analysis provides information about general changes observed in available property value data at the Allendale study area level, the Pittsfield city level and the Berkshire County level. The results confirm the absence of a significant decrease in Pittsfield property values following construction of the OPCA landfill. Changes in property values and sales values are generally attributed to several factors; the results of this analysis do not show that construction of the OPCA landfill in Pittsfield directly affected property sales values or assessed values in the adjacent Allendale neighborhood.

Based on available data, of the 21 parcels in the Allendale neighborhood study area sold more than once since 1981, property sales values increased for about 75% of the parcels evaluated and decreased for about 25% of the parcels evaluated. These results indicate an overall increase in study area sales values since 1981.

The FRED data analysis indicates that, in the years following construction of the OPCA landfill, property sales values across the entire city of Pittsfield increased until around 2008, consistent with county-wide trends. Those results indicate that the city did not experience a noticeable decrease in property sales values soon after construction of the OPCA landfill. The decreases observed in sales between 2008 and about 2016 at both the city and county level are consistent with national trends during that time, attributed in large part to the Great Recession. The national HPI peaked in April 2006, reaching its maximum decline in March 2011, before returning to a new peak in October 2017. According to a 2018 [CoreLogic report](#), after housing prices fell 33% during the recession, housing prices have now returned to peak levels in most areas. The rebound in sales values for Pittsfield and Berkshire County after the recession can be seen in the study area sales analysis and the FRED graphs.

Changes in assessed property values in the Allendale study area and citywide are not entirely consistent with the changes observed in sales values. Most of the 235 study area parcels experienced an overall decrease in assessed value between 2009 and 2020. The entire study area saw an overall decrease in assessed property values of about 16% between 2009 and 2020. During the same timeframe, the city of Pittsfield experienced an overall decrease in assessed property values of about 13%. These results indicate that assessed property values are not necessarily reflective of actual property sales values and housing



market conditions. However, assessed property values increased in the study area and Pittsfield between FY 2020 and FY 2021; that change likely illustrates the lag between assessed values and actual sales values. It also confirms that changes in assessed property values in the study area near the OPCA landfill have been relatively consistent with changes citywide (as seen by comparing Figures 2 and 3). It should be noted that assessed property values were only available dating back to 2009 (FY 2010). Therefore, this part of the analysis would not capture any changes from immediately after construction of the OPCA landfill.

#### Narrative Points Regarding the Potential Effects of the New Landfill in Lee

EPA is proposing construction of a new landfill – the Proposed Upland Disposal Facility – in the town of Lee. The proposed landfill location in Lee is about 12 miles south of the OPCA landfill in Pittsfield. The landfill will contain wastes from the cleanup of the Rest of River part of the GE-Housatonic River Superfund site. Skeo reviewed available information about the proposed location of the new landfill and compiled the narrative points below regarding its potential impacts on the surrounding community.

- The proposed landfill location is within a larger industrial area (see Figure 5). It is not in close proximity to existing residences (except for two), schools, or parks. The proposed location seems to be selected with potential impacts on the surrounding community minimized as much as possible.
- Its proposed location is bordered to the north and east by a large state forest. The nearest land uses include a motorcycle club to the east, commercial and industrial uses in buildings to the northwest and west, and the Housatonic River to the west.
- The closest residential areas to the west (homes along Brown Street and Crystal Street) are separated from the proposed landfill location by wooded areas and the Housatonic River.
- The closest residential areas to the south (homes along Woodland Road and Washington Mountain Road) are separated from the proposed landfill location by wooded areas, two existing landfills and an electrical substation.
- There are already two other landfills located immediately south of the location proposed for the new landfill. Regardless of whether those existing landfills negatively affected surrounding property values, the addition of a new landfill in the same general area would not likely result in additional property value impacts.
- One of the two landfills south of the proposed landfill location (along Willow Hill Road) is the Schweitzer-Maudit International, Inc. paper sludge [landfill \(also known as the former Kimberly-Clark landfill\)](#). It serves as an excellent example of how a closed industrial landfill can be returned to productive reuse that benefits the community. The landfill was closed and capped in 1994, in accordance with state regulations. Today, the landfill supports [Willow Hill Solar Farm](#), a 2.6-megawatt fixed-tilt solar installation (Figure 5). The project sells net metering credits to the towns of Lee and Lenox. The [project](#) generates and sells renewable energy certificates under the Massachusetts SREC II program. It started operating in April 2017. According to a July 2017 Berkshire Eagle article<sup>1</sup>, “Greenwood (the solar developer) has agreed to share 80 percent of the production with Lee and 20 percent with Lenox. The savings will come in the form of net-metering credits applied to each municipality's electric bill received from Eversource, which serves all of

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<sup>1</sup> Lindsay, Dick. “Three months in, Lee’s newest solar project has a higher output than expected.” *The Berkshire Eagle*, July 31, 2017.

Lee and Lenox Dale. Depending on the cost of electricity generated, the solar array should save Lee several hundred thousand dollars per 20-year period ... In addition to reducing Lee's electricity costs, Greenwood has agreed to pay the town a nearly \$41,000 annual payment for each of the next 20 fiscal years. The payment is in lieu of personal property taxes Greenwood would have paid on the solar array itself."

- It is likely that the long-term economic and environmental benefits of the river cleanup will outweigh any short-term negative impacts.
- Following landfill closure (with property owner approval), the property may be available for beneficial reuse. Land uses hosted on other such landfills have included solar farms, parks, athletic fields and other uses compatible with a landfill cap.
- The proposed landfill will be used only for wastes generated by the cleanup and that the landfill will be closed either when it is full or at the end of the river cleanup. It will not be like large municipal garbage landfills, which are often associated with long-term, significant truck and vehicle traffic and unpleasant sights and odors.

Figure 5. Proposed Landfill Location in Lee, Massachusetts, and Surrounding Features

